Mold Technologies Division

Division of Society of Plastics Engineers

Volume 37, Issue 2, Quarter 1 2016

Message from the Chair

Glenn Starkey

SPE Mold Technologies Division Chair

Quarter 1 has just come to an end and my hope to those in the Mold Technologies Division is that first and foremost… Business is good for you!

Economic outlooks for our industry are favorable, neither rosy nor pessimistic. The American Mold Builders Association Annual Business Forecast reported that for 1st Quarter trends, 10% of respondents felt conditions were Excellent, 36% felt they were Good, 44% Fair, and 10% Poor. While not overwhelmingly negative, it was less positive than when the same question was asked in the previous two years.

Mold building has become more and more market specialized, and for outlooks on specific end markets, *Mold Making Technology Magazine* gathers and reports end market data, and houses this info at www.moldmakingtechnology.com.

Why talk of business forecasts within a technical engineering society? Because the first things to go during rough times are the things that we hold near and dear to our hearts: Investment in R&D, and future oriented initiatives for developing the current work force, and investment in the future workforce.

With the outlook for this year being overall positive, your MTD Board is investing time and resources in technical conferences as well as the next generation of mold technology professionals. We're gearing up for technical presentations at Antec in Indianapolis, May 23-25 2016. We're also offering grants to schools with a mold related curriculum, and if you are familiar with a worthy recipient, contact Greg Osborne at the contact info on Page 6.

If based on the year's start your work world is looking good, please consider donating some time, be it great or small. A great way, would be to throw your hat in the ring to serve on this group's Board. A small yet significant way to help would be to nominate a colleague for our Division's annual Mold Designer of the Year Award, or Mold Maker of the Year Award. Simply drop me a line at gs@procomps.com to discuss either topics more.

John Kennedy once said "The time to fix the roof is when the sun is shining", and we hope that at this time business conditions are such that you're able to assist our Division in further developing our industry.

In This Issue

Sponsor's Index

A Message from the Newsletter Editor

Clare Goldsberry

SPE Mold Technologies Division
2016 Newsletter Editor

We continue to hear a lot about the skills gap and the struggle that mold makers and other manufacturers have trying to find skilled employees. Self-styled apprenticeship and intern programs are becoming popular among mold making and molding companies, as they create "grow-their-own" skills and education programs.

Working within their communities with the local junior high and high schools, educating guidance counselors and career planning personnel, many manufacturers are catching the attention of these young people with the opportunities that mold making and molding offer. Several other factors are playing into this move including the price of college education, which leaves many young graduates with a lot of debt and few job prospects. Work programs that offer both hands-on and classroom time provide great opportunities for young people to earn a living while nailing down a good career path in manufacturing.

Some unique ideas for a program include R&D Plastics (Hillsboro, Ore.) which was recently honored as the 2015-2016 School to Career Business of the Year by the Hillsboro (Oregon) Chamber of Commerce at the 11th Annual Crystal Apple Awards celebration. Dedicated to promoting careers in the plastics industry, R&D Plastics focuses on those high school students who are not planning to go to college as well as those attending community colleges. R&D Plastics, a custom injection molder and mold maker, also provides tours, guest lectures and seminars for a number of colleges and university students in the area.

More companies are participating in Manufacturing Day as a way to open their companies to the public and provide information about the excellent career opportunities available. Educating both students and parents is a key factor in capturing the hearts and minds of these young people and getting them interested in manufacturing.

More formal programs are being developed by various trade groups such as the TMA and the AMBA, and community colleges are realizing that maybe it wasn't such a good idea to drop their skills programs. Thanks to help from machinery suppliers and other industry firms, some of these community colleges are reviving those programs once thought no longer necessary.

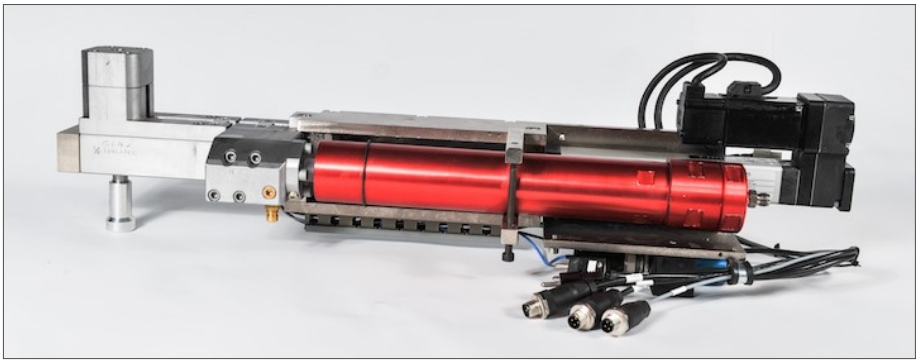
...continued on page 11

DIVISION HOTLINE

For questions or comments about the SPE Mold Technologies Division please contact Glenn Starkey at:

gs@procomps.com
1-800-269-6653

Kipe Molds Shows Breakthrough Technology at MD&M Minneapolis



Kipe Molds Inc., designer and developer of tooling and accessory technology for molding liquid silicone rubber components, recently displayed the latest version of its MD 125 Servo Series MicroDeck for molding micro LSR parts. “This MD Servo Series MicroDeck controller was purpose built for liquid silicone rubber molding at the micro level,” said Dana King, Business Development manager for the Placentia, CA-based company. “The accuracy of this new platform is unbelievable and there is no flash because the position of our pressure sensor transducer is located close to the gate and there are no pressure drops upstream. This also makes it easier to diagnose where you’re at in the process.”

The MD 125 Servo Series MicroDeck was actually developed several years ago by Kipe Molds in response to a customer’s desire to achieve truly flashless LSR components. The customer needed to mold a really small part but none of the machines they looked at could do the job, King explained to PlasticsToday. “We took it on. George Kipe had the know-how to achieve what the customer wanted, but this collaboration with the customer finally gave him the opportunity to turn his idea into a reality.”

Kipe designed and built the system for this specific customer which ultimately patented the system. The original agreement with the customer stated that Kipe couldn’t sell the system into the same market as the customer’s. However, Kipe couldn’t guarantee that if another molder bought the system, it wouldn’t be used for that market.

About a year ago Kipe went to the customer and worked out an arrangement to license the patented system. “We had a pneumatic version at NPE, but that one was not nearly as good as what we have now,” said King. “We were already working on the better controls we knew we needed for the medical device market. Now that we have it we are really excited about the possibilities of the MD Series Servo MicroDeck. They were a great customer to work with and they always wanted us to succeed with them in this joint technology because everybody benefits.”

The MD 125 Servo Series MicroDeck’s platform supports four injection unit sizes covering a working shot volume range of 0.003 cc to 7.840cc, and is capable of molding a 0.007-gram part with no flash. The servo-actuated injection plunger provides a state-of-the-art velocity and position control, is capable of mounting on standard molding machines, and can be integrated into a 2-shot platform.

The system also features interface via HMI touch screen with purpose-built controls package designed specifically for silicone micro molding. It offers multiple options for injection and hold sequencing to enhance the system’s capability to produce the best process for a customer’s molding requirements. Process monitoring and alarm condition settings are designed to support precise production molding, and has Euromap 12 interface to the molding machine for enhanced level of controls within the injection unit. Wireless remote process monitoring is an available option.

Boy Machines partnered with Kipe to help develop this system, as the MD 125 is a complementary product to their equipment. “Now, Boy has the complete size range for accurate molding of these small LSR parts for the customer,” said King. “Our system will go on other machines, but it fits well with the Boy in particular.” (www.kipemolds.com)

Upcoming Industry Events

SPE ANTEC 2016
May 23-25, 2016
Indianapolis, Indiana
www.4spe.org/ANTEC

AmeriMold 2016
June 15-16, 2016
Novi, Michigan
www.amerimoldexpo.com

MD&M Minneapolis
September 28-29, 2016
Minneapolis, Minnesota
www.MDMminn.com

MD&M East
June 14-16, 2016
New York, New York
www.MDMeast.com

IMTS 2016
September 12-17, 2016
Chicago, Illinois
www.imts.com

K 2016
October 19-26, 2016
Dusseldorf, Germany
www.k-online.com

Hasco Offers New Compact Hot Runner System and In-Mold Memory Information Storage

Hasco just announced its new Mold Memory Information Storage (A5800) that stores all the information about the mold directly in the mold. The A5800 offers full traceability of production data, something that is gaining ever increasing importance for quality assurance purposes, said Hasco.

The new Mold Memory A5800 is an information storage unit that is permanently installed in the mold and can be used to archive all the mold and/or article-specific data. The robust data storage device has a capacity of 16 GB and a USB 2.0 interface, and can be used at up to 100° C. A two-component protective flap with a TPE seal provides protection against splashes and soiling. The special design permits flush mounting directly in the mold, preferably in the risers, without any protrusions that would constitute a hindrance.

The installation of the Hasco Mold Memory A5800 directly in the mold allows rapid access to all the data and the easy archiving of designs, injection parameters and milling programs, etc. thus permitting consistent documentation.

Also announced by Hasco is the company's new compact hot runner system, the H4070 with a Multi-module design complementing the extension of Hasco's proven Multi-shot product. The new compact hot runner system is available and ready to install on short notice. In

just five working days, Hasco promises it can deliver a complete system with a fixed spacing of 22 mm, comprising 8 or 4 modified Techni Shot nozzles and a naturally balanced manifold, fully assembled and ready to install.

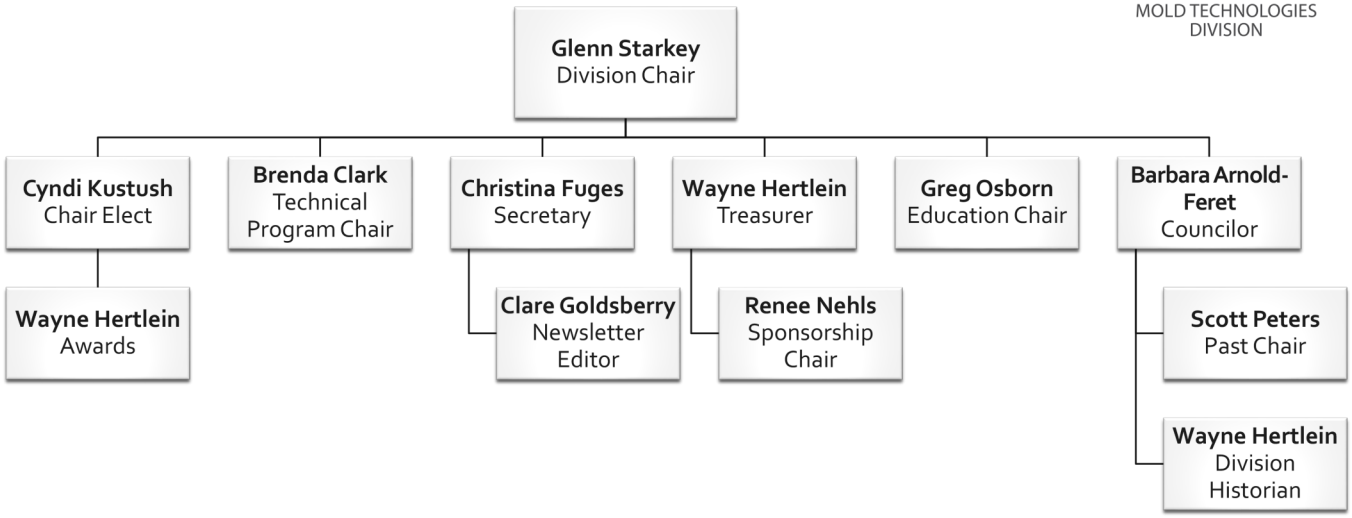
Leak-free operation in guaranteed. The nozzle tips and heating can be mounting from the parting plane, thus facilitating maintenance. The cable outlets can freely rotate in the radial direction.

Nozzle lengths of up to 125 mm are available, along with variable nozzle tips in CuCoBe or TZM. Individually controllable nozzles and manifolds ensure a highly uniform temperature profile, and permit the use of engineering plastics with a narrow processing range to be reliably processed. The option of a finished "hot half" H4470 with outside dimensions of only 196 x 196 mm minimizes the outlay on tooling and production, with the added benefit of guaranteed increased productivity and reducing production times for injection molds.

Hasco also introduced its new Gear Housing and Rack Unit for stack molds. With the demand for greater production efficiency and higher machine utilization, Hasco's new standardized components – the gear housing Z1545 and the rack unit Z1547, enable the simple, reproducible and inexpensive installation of stack molds of this type.

The low height of the Hasco components permits small distances between the tie bars on the machine and also high opening forces through the use of high-quality material. DLC-coated slideways minimize wear and extend maintenance intervals. All standardized components are available from stock. The use of Hasco stack mold components ensures that the mold production costs remain calculable and thus has a positive impact on item costs and competitiveness. (www.hasco.com)

2015/2016 Board of Directors
Mold Technologies Division
Society of Plastics Engineers, Inc.



2015/2016 SPE Mold Technologies Division Board of Directors Contact Information

Division Chair
Glenn Starkey, Progressive Components
P: 847-487-1000 | Glenn.Starkey@procomps.com

Chair Elect
Cynthia Kustush, Moldmaking Technology Magazine
P: 513-338-2219 | CKustush@gardnerweb.com

Newsletter Editor
Clare Goldsberry, Plastics Today
P: 602-996-6499 | clarewrite@aol.com

Technical Program Chair
Brenda Clark
P: 828-650-2600 | BClark@hasco.com

Division Historian / Treasurer
Wayne Hertlein
P: 248-817-8110 | whertlein@wilbertinc.com

Secretary
Christina Fuges, Moldmaking Technology Magazine
P: 267-261-5550 | cfuges@gardnerweb.com

Education Chair
Greg Osborn, Synventive Molding Solutions
gosborn@synventive.com

Sponsorship Committee Chair
Renee Nehls, MGS Manufacturing Group
P: 262-509-4165 | renee.nehls@mgsmfg.com

Councilor
Barbara J. Arnold-Feret
EngATech | email: ppsltd@airmail.net

Immediate Past Chair
Scott L. Peters, HunterDouglas Mfg Co.
P: 270-852-4228 | scott.peters@hunterdouglas.com

SPE Mold Technologies Division
February 18, 2016 Meeting Minutes

To: Board of Directors Mold Technologies Division SPE
From: Christina Fuges – Secretary to the Board
Subject: Minutes of the Meeting of the Board of Directors on 18-February 2016

	Present	Absent		Present	Absent
Glenn Starkey, Chair	X		Cyndi Kustush	X	
Scott Peters		X	Brenda Clark	X	
Wayne Hertlein	X		Christina Fuges	X	
Barbara Arnold-Feret		X	Clare Goldsberry	X	
Greg Osborn		X	Pete Kambouris		X
Renee Nehls	X				

The meeting was called to order by Division Chair – Glenn Starkey at 11:05am (CST). Division Chair presided over the meeting – Christina Fuges took the recorded minutes as the Secretary. Roll was taken according to the leadership roster.

Motion made to begin meeting.

Opening comments
Introductions of Board members. Agreed to third Thursday, 11am CST time monthly meetings/calls, unless a conflict arises.

Division Chair Report – Glenn Starkey
Looking forward to 2016, where our Division infrastructure is developing well, while also we are achieving some positive steps to assist the industry.

Chair Elect Report – Cyndi Kustush
Thanked Board for understanding and offered continued support.

Division Secretary Report – Christina Fuges

- No minutes to review: November 11, 2015 Minutes were approved November 20, 2015.
- On February 5, 2016 a motion was made to retain Mr. Glenn Starkey as Chair of the Division Board of Directors for the Mold Technologies Division, the Society of Plastics Engineers, and for the unexpired term ending June 30, 2017

to appoint Ms. Cyndi Kustush as the Division's Chair-Elect. All were in favor and the motion was approved.

- Next Generation Videos: Stats from YouTube: MoldMaking Matters – posted 11 months ago, 1,040 views; MoldMaking Your Road to Success – posted 8 months ago, 1,670 views. Another video planned for spring/summer with Gardner along with Creative Technology to showcase Westminster Tool's culture of continuous learning, training and investing; will make this the subject of our next video in our "Manufacturing Matters" video series.

Treasurer's Report – Wayne Hertlein

Wayne reviewed Division finances.

- Checking account total =$41,394.72
- Five investment accounts, renewal dates, and acct summaries =$89,405.48
- Mold Division Total: $130,800.20
- ITQ Foundation (Wayne included chronology of IT Quarnstrom checking account)
  - Total: $536.99 with Department of Michigan. Still being held. Wayne is working through paperwork to claim this account money.
  - Investment account: $39,801.05
  - Total: $40,338.04

Total SPE MTD Net Worth: $171,138.24

TPC / Mini Tech Report—Brenda Clark

ANTEC Update: (Indianapolis May 23-25, 2016)

- Multiple online meetings have taken place from last year to now for the TPC side for ANTEC 2016 in Indianapolis, IN.
- The technical paper submission requests were sent in the November/December 2015. The paper submission site for ANTEC was held open until December 22 and the notification was for January 11.
- Our division had only one paper submission by that date from a location in China. Recent activity has allowed our division to gain another paper from a 3D printing for mold making perspective.
  - *Automated generation of venting system in plastic injection mold*
  - *3D Printing Offers a Giant Step for Short Run Injection Molds*
- The agenda for sessions is now available online for ANTEC 2016.
- The low turnout for papers may have been due: being a year after NPE/ANTEC, late notification start for paper call, requiring a technical paper with submission, our name change.
- Overall paper response: 414 total papers, 21 declined, 239 pending, 243 reviewed.
- Our division will be partnering with Injection Molding Division (received 57 papers) on the Monday, May 23rd and help them host the afternoon session that day. Working directly with Jeremy Dworshak from IMD about our session. Glenn will help moderate with Brenda as alternate, should one be needed.
- The call for student posters was just sent out this week, February 16th.
- Glenn checking on certificate holders from last year to use for the Awards. Wayne will handle ordering more if necessary, and Cyndi will coordinate printing of certificates for Awards/speakers.

ANTEC 2016 Meeting

- Brenda submitting ANTEC 2016 meeting request form for a *Division Board Meeting* during the ANTEC. Also scheduling our *Division Business Meeting* to take a place following the Board meeting.
- Brenda reserving a table for our division for the welcome reception. Tables are $1,000.00
- ANTEC Welcome Reception is Monday, May 23 from 6-7:30pm at the JW Marriott in Indianapolis and it is open to everyone who attends ANTEC.
- Brenda, Clare, Glenn and Cyndi committed to attending ANTEC.

Division Councilor Report – Barbara Arnold-Feret

None; Glenn will contact Barbara.

Membership Chair – Barbara Arnold-Feret

None; Glenn will contact Barbara.

Sponsorship Chair Report – Pete Kambouris / Renee Nehls

- Glenn reported for Pete. Pete has discussed with Glenn that job duties have prevented him from fully committing to this position. Renee is now assuming

ATTEND THE WORLD'S LARGEST PLASTICS TECHNICAL CONFERENCE!

LEARN FROM:

Plenary & Keynote Speakers, New Technology Forums,
Tutorials, Panel Discussions and 600+ Technical Talks

NETWORK WITH:

Industry Experts, Session Presenters, Moderators,
and Attendees from around the globe

PARTICIPATE IN:

The Plastics Race®
A scavenger hunt with a plastics twist

Plastics for Life™
Vote for the best part in SPE's Global Parts Competition

Poster Sessions
Students & professionals speak about trending plastics topics

Platinum Sponsor

A. Schulman

Learn more at:

www.antec.ws

this role and will be working with Pete and Jerry Fisher to learn more about role, process, etc. Glenn will do an email introduction to Jerry for Renee. Renee is connecting with Pete on the transfer of deposits slips so Renee can bank them. New year begins July 1, 2016, so Renee can start working on revamping sponsorship opportunities.
- Renee will be maintaining the sponsor list, which is accessed by Brenda as part of a callout for speakers.

Newsletter Editor Report – Clare Goldsberry
- Winter edition going out in early March. It may include nominees or an update on Mold Maker and Mold Designer of the Year awards.
- Spring (late May/early June) to include wrap-up on ANTEC and Mold Maker and Mold Designer of the Year winners; Summer (July/August) will include wrap up on Amerimold. Goal is to shoot for the second month of the quarter delivery.
- Clare composing email for Pedro to blast out to membership to solicit news/content for newsletter. Then update it each quarter to blast it out.
- Cyndi and Clare will develop a schedule to ensure this happens regularly and will send to Glenn and Renee for review/approval.

Awards Chair Report – Wayne Hertlein/Scott Peters
- Typically, past chair puts forth nominations for Awards (for Honored Service Members and Fellows), but we missed the deadline for this year.
- E-blast going out February 25-26th to nominate new directors and call out for MoldMaker and Mold Designer of the Year Award nominations.
- Wayne is updating Awards with new Division logo ($35.00).

Education Chair Report – Greg Osborn

Scholarship Update
- 140 grant applications were sent to over 80 Colleges and Universities.
- Received a few responses, mainly informational, but no applications yet.
- One of the responses was from Western Michigan asking if we would be interested in sponsoring a half dozen students wanting to go to ANTEC. Board agrees enthusiastically to support students presenting a student paper at ANTEC on a moldmaking or the tooling within the injection molding process.
- Greg will connect with Jay Shoemaker Adjunct Assistant Professor at Western Michigan University on our student presentation requirements and determine a dollar amount for applicable students. Greg will then present a proposal to the board. Our goal would be to make this a model for other schools with mold-related programs (such as Ferris State, Ball State, etc.)
- All in favor of a motion to authorize Greg to further connect with Jay on this opportunity.
- Greg will connect with Wayne on how to process receipts for reimbursement.
- Grant and scholarship funding approval (????)

Division Marketing Report – Glenn Starkey
- Cyndi will coordinate marketing, including booth at Amerimold, Mike Koebel, etc. and train an incoming director/marketing person.
- Christina securing SPE Booth for Amerimold.
- Wayne working on Detroit Division to help staff the Amerimold booth.
- Cyndi working on SPE MTD business cards for promotion, marketing and networking opportunities.
- Cyndi checking with SPE on any freebies to use as event giveaways, will email BOD in 2 weeks for ideas to implement before Amerimold.
- Board thinking of MTD-specific giveaway ideas that Cyndi will work on ordering (laser pointer, pen/stylus, etc.)

New Business
- Glenn shared leadership roster.
- Call will go out to vote on 3 positions – Brenda TPC, Marketing and Assistant Treasurer.
- Glenn is reviewing updates to bylaws that will be sent out to membership.

Next Meeting: Tentatively April 14

Glenn calls for a motion adjourn the meeting. All in agreement. Meeting adjourned.
Respectfully submitted,
Christina Fuges, Secretary to the Board

A Message from the Newsletter Editor *(cont'd from page 2)*

While investments in automation among mold manufacturers is picking up steam, the need for employees remains as great as ever and doors open for new skills and abilities in robotic integration, programming, and maintenance become in demand.

If you haven't already contacted your local schools about partnering with them to educate the educators, the students and the parents about the great careers available in manufacturing, now is a good time to get started. You just might find some excellent future employees in the next group of students you tour through your shop.

Micro Mold Invests in New CNC Milling Workcell

Micro Mold Co., Inc. and Plastikos Inc. recently announced that a major renovation is currently underway at Micro Mold. Once completed, a new Mori-Seiki 5-axis CNC milling center will be installed coupled with a System 3R Workmaster robot to create a highly-automated and highly-efficient workcell. This capital investment will significantly reduce changeover time and resources, compared to a traditional 3-axis machining center, and further enhance Micro Mold's hard-milling capabilities. The installation of the new CNC milling center, scheduled for completion in June of this year, will also play a "key role to further improve our overall production efficiencies that will translate into reduced lead times for our precision mold manufacturing services," said Micro Mold.

"Micro Mold views our investment in cutting-edge technology as critical to staying competitive in the precision mold building industry," said Ryan Katen, Micro Mold's General Manager. "We feel that this investment is just one step toward fulfilling our vision of continuous innovation through technology advancement."

Over the last five years, Micro Mold has invested well over $1.5 million into facility and equipment upgrades. Additionally, the company continues to train and invest heavily in its workforce "to address the skills gap that continues to strain the domestic mold-making industry," said Micro Mold. "Currently we have three employees who are in various stages of their apprenticeship, and who will receive detailed hands-on training on the latest equipment and technology at Micro Mold." (www.plastikoserie.com)

e-Xstream engineering Announces Solution to Accelerate Design Reinforced Plastics Parts & Molds

Designing parts and molds for the molding of components using reinforced materials just go easier and faster with e-Xstream engineering's new technology. eXstream engineering, a MSC Software company, has just released Digimat-RP/Moldex3D (an OEM version of Moldex3D embedded in Digimat-RP) that provides structural engineers using Computer Aided Engineering (CAE) with easy fiber orientation estimation within Digimat-RP.

Philippe Hebert, Product Manager for e-Xtream engineering, told PlasticsToday that designing for reinforced plastics can have challenges because in the injection molding process the fibers can go in any direction, depending on the geometry of the part and the process setup. "Because there are locally different fiber orientations everywhere in the plastic part we end up with a complex behavior," he said. "With the material modeling using Digimat, we can tell the engineers how the material behaves locally, depending on the fiber orientation, both from nonlinear stiffness and failure."

The new solution provides structural CAE engineers with an accurate estimate of fiber orientation for their Finite Element Analysis (FEA). "Usually the engineers who simulate the reinforced plastic parts have to make assumptions about the way the material will behave. So they are not able to predict part behavior," said Hebert. "e-Xstream engineering was born because we decided to connect the information from the manufacturing process simulation with the structural analysis process. By doing so, we allow the engineers to get rid of assumptions and fully predict what the material will do through simulation. They can actually see what will happen to the part and therefore make the right design decision."

An additional benefit, Hebert noted, is an optimized use of the material in the part. "Because all assumptions on material behavior can be removed, the design of plastic parts can be efficient and lead to weight reduction, from 10, 20 or up to 40%," he explained.

Digimat-RP/Moldex3D benefits from the integrative technology of Digimat-RP, allowing easy and accurate non-linear analysis of reinforced plastic parts through advanced nonlinear micro-mechanical material models and an intuitive user interface. Digimat-RP/Moldex3D brings efficiency of predictive plastic part analysis to a whole new level. Multiple process/design iterations for part optimization (i.e. confident lightweight design) can now be achieved within a single day. Hebert added that in the past cycle time for getting the simulation done used to take up to two weeks. Now with the Digimat-RP/Moldex3D product, e-Xtream engineering has proven that four to five iterations a day is possible.

Using the new Digimat-RP also simplifies the need for multiple software programs, such as one program for injection simulation used by process engineers and a second one for structural engineers. This was not the most efficient means because often a project depends on contributions from several departments, a "blocking point" for customers, explained Hebert. "Digimat-RP/Moldex3D changes this paradigm and provides structural engineers with direct and easy access to injection simulation and fiber orientation estimation, thereby significantly improving the efficiency and accuracy of their plastic part analysis."

MSC Software (www.mscsoftware.com) is dedicated to helping product manufacturers to advance their engineering methods with simulation software and services, and improve quality, save time and reduce costs associated with design and testing of manufactured products. e-Xtream engineering is headquartered in Belguim and Luxemborg, with team members located globally. As a part of the MSC family, e-Xstream engineering has additional team members in China, India and the US.

(www.exstream.com)

Industrial Molds Invests in New Automated EDM Cell

Investments in cutting edge technology and state-of-the-art equipment continues at Industrial Molds, Rockford, IL. According to Andrew Peterson, Production Supervisor, the company will be completely revamping their automated EDM machining cell by replacing the current system with two Sodick AG60 EDM machines and an Erowa ERS robot system that will feed both machines.

Industrial Molds in Rockford, IL, currently has three fully automated machining cells: one in EDM, one in carbon cutting and one in high-speed machining. The advantage of

automation is shortened lead times and a decrease in human errors. “In order to fully leverage our investments in automation, we’ve focused a lot of time and energy in designing and implementing robust systems and procedures” explains Peterson. “We operate a paperless system so everyone on the production floor is working off the same data rather than each mold maker doing it their own way,” Peterson explained.

“We have been able to build higher quality molds in shorter lead times because of our continuous investments in equipment, technology and processes improvements” says Peterson. “We have developed a system that brings consistency and repeatability to the mold manufacturing process, making everyone a winner.” (www.industrialmolds.com)

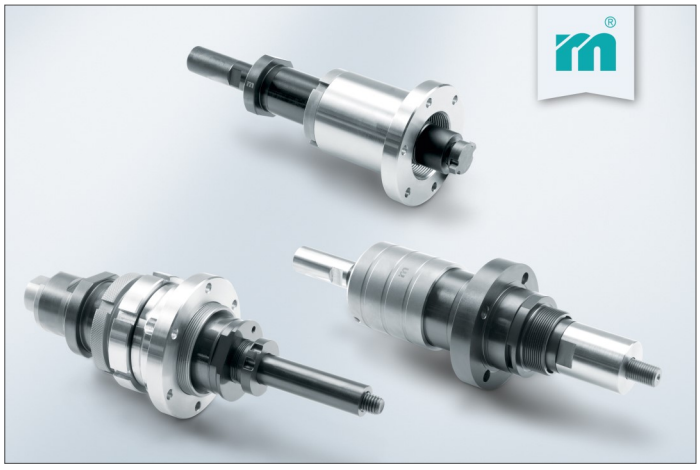
Boride Introduces the Ultrasonic ECO Polisher

The latest in mold polishing comes from Boride Engineered Abrasives, a Traverse City, MI-based company that develops and manufactures abrasive products for industrial and consumer applications, introduced its new Ultrasonic ECO Polisher to its lineup of mold polishing equipment and supplies. The ECO Polisher is a high performance ultrasonic polishing machine offered at an attractive price point, is ideal for precision polishing and deburring. Its light weight, stable body design and smooth vibration prevent fatigue even after long-time operation making it an operator-friendly tool.

The ECO Polisher is designed for efficient use of detail polishing stones including Ceramic Super Stones and Cristones. The ECO Polisher is available through Boride's network of distributors or online at borideabrasives.com. Boride's demonstration program offers a risk-free 10-day free trial of the ECO Polisher.

Muesburger Offers New DLC Coated Two-Stage Ejectors

All two-stage ejectors from Meusburger are not available with DLC coated functional surfaces. Through the DLC coat the wear is minimized and the two-stage ejectors' durability is significantly increased, said Meusburger. This results in a longer tool life and longer maintenance intervals. Thanks to the optimal dry-running properties of the DLC coated functional surfaces, the two-stage ejectors can be used without any lubricant, making them particularly suitable for medical and food processing applications. The required strokes are infinitely adjustable and force-controlled. All DLC coated two-stage ejectors are available from stock at Meusburger. (www.meusburger.com)



StackTeck Accelerates Capacity and Growth to Improve Lead Time

Continuing with its aggressive plans to increase capacity, Brampton, Ontario-based StackTeck will invest $4.2 million in 2016 on new machinery and automation throughout the company's manufacturing and testing facilities. This latest planned investment comes on the heels of a $4 million investment in new equipment in 2015. During both years, the rate of capital spending is more than double that of pre-2015 levels.

"We plan to invest over $4.2 million in new machine tools within a time window of less than 12 months, which will allow us to ensure strong support for our customers' new product launches," stated Lou Dimaulo, StackTeck's vice president of Operations. "We have implemented a new scheduling system in the central areas of our manufacturing facility, so that we can keep close control of the new jobs that are brought into the manufacturing floor. New machines and robotics will add productivity throughout the plant allowing us to get work done more efficiently and effectively."

StackTeck has also made significant building upgrades and has estimated a total 15% capital increase of machine resource hours for 2016. In order to complement the capacity additions, StackTeck will be adding new team members to their night and weekend shifts during the first quarter of this year.

StackTeck specializes in manufacturing high-volume, high speed molds, both stack molds and single-face molds, for the packaging market. The company has developed unique technologies for the packaging industry including the TRIM thin-wall packaging system. Other markets served include the cap and closure market; and the medical and labware markets StackTeck provides complete systems integration solutions that include automation, mold and molding press delivered in a turnkey system.

Randy Yakimishyn, President and CEO of StackTeck, commented: "Delivering great customer experiences is what we are focused on at StackTeck. Our capacity has been substantially increased in the lst few years. Since 2011 our average yearly sales growth has been 7.5%, and we are now positioned to grow much more rapidly. We also have the resources available to deliver on large mold programs while improving our overall lead times."

(www.stackteck.com)

Tomorrow's Toolmaker

Did you ever wonder what tomorrow's tool making shop will look like? With all the automation being implemented in the form of work cells and robotics, there's an old joke that says tomorrow's shop production floor with have two employees: a man and a dog. The man is there to feed the dog and the dog's job is to bite the man if he tries to touch the machines.

Well, that's not quite true. We'll always need people even when it comes to driving cars. Robots are efficient, don't take sick days or vacation, but there are many facets to the human mind that discerns, make judgments, provides perspective, and can respond quickly to sudden changes. That's something that Google's driverless car can't do and Google is trying to fix. But I doubt that will happen.

What tomorrow's tool maker will also do is be innovative and creative, with the ability to come up with really cool and unique solutions to their customers' greatest manufacturing challenges. Automation will assist the humans in the shop to be more time-efficient and cost-effective, and the human will help the robot be more flexible through better, faster programming.

But it wouldn't hurt to bring your dog in just in case!

~ Clare Goldsberry

Newsletter Sponsorship

The SPE Mold Technologies Division Newsletter is now issued four times a year to over 1500 members worldwide. Readership is composed of individuals involved in all aspects of the mold making industry. These issues are made possible through the support of sponsors shown in this Newsletter. SPE Mold Technologies Division thanks these sponsors for their generosity and encouragement in the publishing of our Newsletter.

For information on sponsorship of future issues, please contact:

Clare Goldsberry, Newsletter Editor | Pete Kambouris, Sponsorship Chair
602-996-6499 | clarewrite@aol.com | 262-786-4521 | pckambouris@wi-engraving.com

Publication Release Dates

Fall Issue
November 2015

Winter Issue
January 2016

Spring Issue
April 2016

Summer Issue
June 2016

SPONSORSHIP RATES

Size	Yearly Rate	Per Issue
1/10 page (2h x 3.5w biz card)	$250	$90
1/4 page (4.75h x 3.5w)	$625	$225
1/2 page (4.75h x 7.25w)	$1,250	$450
Full page (9.75h x 7.25w)	$2,500	$900

Preferred output: Electronic transfer (BMP, TIFF, PCX, JPEG, PDF)

The Mold Technologies Division Board of Directors is in need of a ***"Few Good Men and Women."***

If you are interested in the continued betterment of our industry around the globe, and would like to be a part of the leadership within the Mold Technologies Division, then we have a place for you!

Please add your name to the form below and return via e-mail to **gs@procomps.com.**

SPE®
MOLD TECHNOLOGIES DIVISION

Name:_____

Mold Maker:_____ Mold Designer:_____ Both:_____

Phone:_____

Mobile:_____

E-Mail:_____